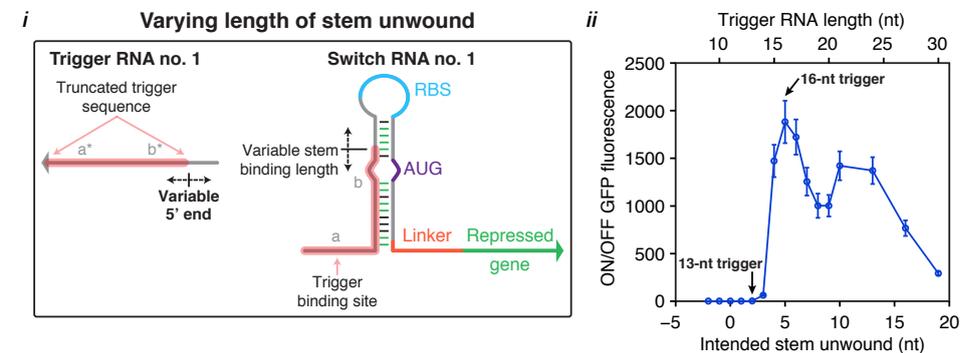
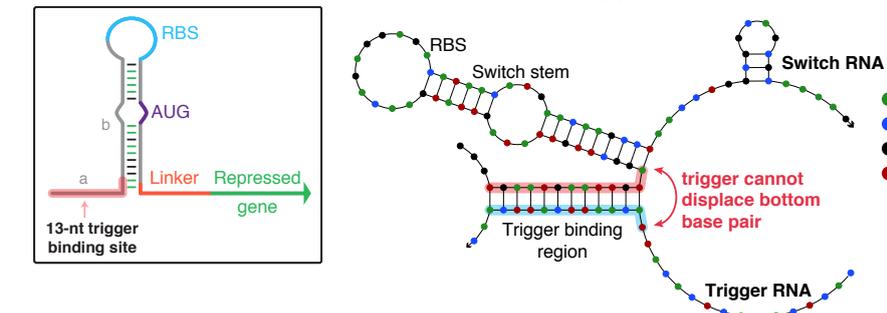


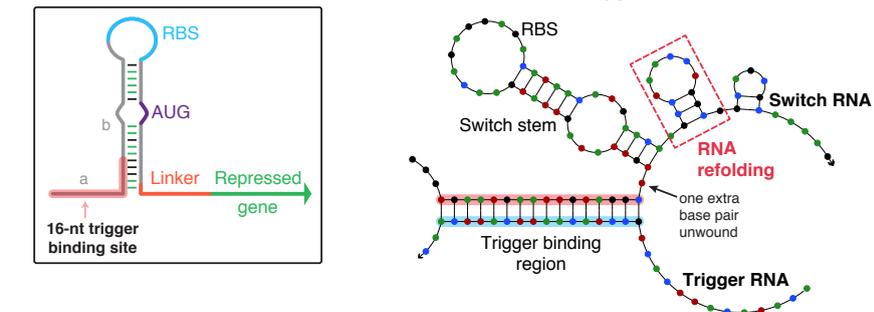
A Detailed study of switch number 1 behavior



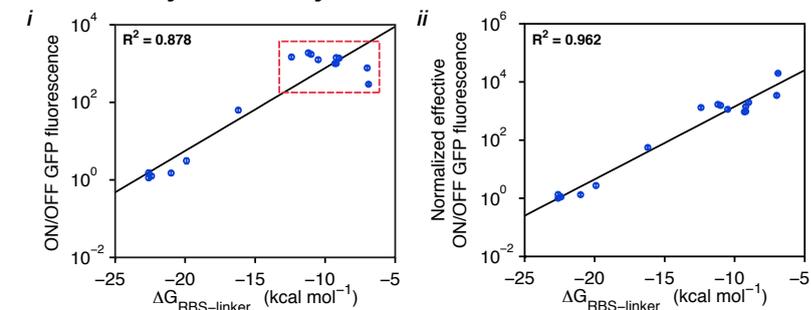
iii Toehold switch no. 1 with 13-nt trigger RNA



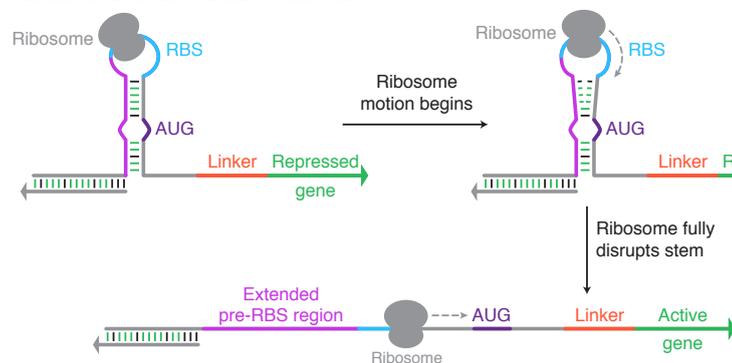
iv Toehold switch no. 1 with 16-nt trigger RNA



B Thermodynamic analysis of switch number 1 behavior



C Schematic of putative mechanism for switch number 1 translational enhancement



D Detailed mRNA sensor design schematic and putative detection mechanism

